# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY <br> FACULTY OF COMMUNICATION AND INFORMATION SCIENCE DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE 

# MASTER OF SCIENCE DEGREE IN LIBRARY AND INFORMATION SCIENCE 

STAGE I FIRST SEMESTER XXXX 2008 SUPPLEMENTARY EXAMINATIONS

## ILI 5102 RESEARCH METHODS AND DATA ANALYSIS TECHNIQUES

Time: 3 hours + 30 minutes reading

## INSTRUCTIONS TO CANDIDATES

1. Question I in Section A is compulsory.
2. Answer question 1 and any other 3 questions from Section B.
3. Importance is attached to accuracy, clarity of expression and legible handwriting.
4. Each question carries 25 marks.

## SECTION A: compulsory

1. A simple user survey is to be carried out to provide effective library services in your library. Evaluate the important stages of the work. Give an outline of the draft questionnaire to be used.

## SECTION B: answer any 3 questions

2. The main modes of scientific thinking include deductive and inductive logic. Illustrate how each of these modes could be used in a research setting.
3. Discuss the main distinguishing characteristics of quantitative and qualitative research methodologies. Use typical research methods of each type to advance your argument.
4. Discuss the control measures that one could institute in a research setting, including the tools that could be used to reduce the margin of error in measurement.
5. Procedures for sample selection in qualitative studies differ from those used in quantitative studies. Assess what you understand of the differences.

6(i) The following table shows the expenditure of Dulabadzimu Public Library on computer equipment over 10 years. Develop a suitable chart to illustrate the expenditure.

Table 1: Expenditure on computer equipment, 1984-1993.

| Year | Expenditure (Z\$ billions) |
| :--- | :--- |
| 1984 | 4 |
| 1985 | 6 |
| 1986 | 9 |
| 1987 | 12 |
| 1988 | 20 |
| 1989 | 18 |
| 1990 | 15 |
| 1991 | 25 |
| 1992 | 30 |
| 1993 | 32 |

6(ii) Briefly describe how you would construct a semantic differential scale.

## THE END

